

REMARKS

Claims 1-3, 5-7, 10-20, 22-26, 29-37, and 39-43 are pending in the present application. Claims 4, 8, 9, 21, 27, 28, and 38 were canceled. Claims 1, 19, 22, 25, 36, 39, 42, and 43 were amended. Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 103. Obviousness

The Examiner has rejected claims 1-43 under 35 U.S.C. § 103 as being unpatentable over Rao et al. (U.S. Patent No. 5657450) (hereinafter *Rao*) in view of Ording (U.S. Patent No. 2001/0055017) (hereinafter *Ording*). This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

A. Amended independent claim 1 of the present invention, which is representative of amended independent claims 19, 25, 36, 42, and 43, with regard to similarly recited subject matter, reads as follows:

1. A method of generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising:

receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device, wherein the first estimate includes a minimum, maximum, and average amount of time to retrieve or prepare the requested content;

generating a second estimate of an amount of time to receive the requested content over a communication link from the content source device;

generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates, wherein the third estimate includes a minimum, maximum, and average time of completion for the content request;

generating a graphical representation of the third estimate, wherein the graphical representation includes an indicator for each of the minimum, maximum, and average time of completion for the content request; and

outputting the graphical representation on a display device.

With regard to claim 1, the Examiner stated:

Regarding claims 1, 25 and 42, Rao discloses: a method, a computer program product and an apparatus for generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising: receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device (col. 7, lines 29-39, Rao);

generating a second estimate of an amount of time to receive the requested content over a communication link (105, 104, fig. 1) from the content source device (col. 8, lines 16-32, Rao); generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates (col. 7, lines 55-67, Rao). However, Rao didn't disclose: generating a graphical representation of the third estimate; and outputting the graphical representation on a display device. On the other hand, Ording discloses: generating a graphical representation of the third estimate (fig. 2, Ording); and outputting the graphical representation on a display device (fig. 2, Ording). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the display the output in the graphical representation device in the system of Rao as taught by Ording. The motivation being to enable the system provides updates on the progress of the task the percentage which is completed and/or estimated time remaining in the progress bar (page 3, paragraph 0022, Ording).

(Office Action, dated February 25, 2005, Pages 2 and 3).

Rao is directed toward a method and apparatus for providing time estimates and progress feedback on long-running distal information source access operations. (Rao, Abstract). Rao teaches that two time estimates are provided with the generated estimation data; one is an estimate of when a "first result" would be returned and the other is an estimate of the completion of the entire operation. (Rao, Col. 7, lines 55-58). Generally, the estimated time it will take for an information source to return a response that may be provided to a client is the "first response" estimate. The completion time estimate is generally the time it takes for the "last" result to be returned. (Rao, Col. 8, lines 16-20). In addition, Rao teaches that if there is no history for a particular sub-operation at a particular time, a default value, e.g., 4 seconds, can be used. Other techniques for providing a default value, e.g., an average of all operations with an information source,

could also be utilized. (*Rao*, Col. 8, lines 39-43). However, in *Rao* there is no reference to an estimate for a minimum and maximum amount of time to retrieve the requested content, nor is there a reference to an estimate for a minimum, maximum, and average amount of time for completion of the content request. Moreover, Applicant agrees with Examiner Nguyen that *Rao* does not disclose generating a graphical representation of the third estimate and outputting the graphical representation on a display device. (*Office Action*, Page 3).

In contrast, Applicant's present invention recites in amended independent claim 1 that the first estimate of an amount of time to retrieve the requested content from a source device includes a minimum, maximum, and average amount of time for retrieval of the requested content. Further, claim 1 of the present invention recites that the third estimate of a total amount of time to complete the content request based on a first and second time estimates includes a minimum, maximum, and average time of completion. Furthermore, the minimum, maximum, and average estimated times of completion for the content request is graphically represented on a display device as further recited in claim 1 of the current invention.

Even though *Rao* teaches an average first response estimate as an alternative default value if there is no history for a particular sub-operation at a particular time (*Rao*, Col. 8, lines 39-43), *Rao* does not teach or suggest identifying a minimum and maximum amount of time to retrieve the requested content from a source device as recited in amended claim 1 of Applicant's present invention. Additionally, *Rao* does not teach or suggest generating and displaying a minimum, maximum, and average time of completion for a content request as further recited in claim 1 of the current invention. As a result, *Rao* does not teach or suggest all the claim limitations of the Applicant's present invention as recited in amended claim 1.

However, Examiner Nguyen also cites *Ording* as a prior art reference with regard to claim 1 of the present invention. *Ording* teaches a user interface that provides continuous feedback regarding a function or task being performed by a computer's operating system. This feedback is provided by means of an interface element that

changes size and/or shape as portions of the task are completed, such as a progress bar. (*Ording*, Page 1, paragraph 0007). When a task is initiated, such as a copying or downloading operation, two threads are launched. One thread performs the actual copying operation itself, and provides updates on the progress of the task, e.g. the percentage which is completed and/or the estimated time remaining. The second thread controls the display of the status indicator, and receives the updates from the first thread to change the length of the progress bar accordingly. (*Id.*, Page 3, paragraph 0022). Therefore, *Ording* teaches that the status dialogic window displays to the user the various indicators of the progress of the task being performed, such as the number of files remaining to be operated on, the time remaining, and the percentage of the task completed. (*Id.*, paragraph 0027).

In contrast, claim 1 of the present invention recites a method for generating and graphically representing a third estimate of the total amount of time needed to complete a content request by combining a first estimate of the amount of time required for the source device to retrieve or prepare the requested content with a second estimate of the amount of time necessary to receive the requested content from the source device over a communication link. Even though *Ording* teaches a progress bar that depicts the estimated time required to receive a content request from a source device over a network, *Ording* makes no reference to including in its time estimate an estimated time for the source device to retrieve or prepare the requested content for transmission as is recited in claim 1 of the current invention. The graphically depicted time estimate in *Ording* is only analogous to the second time estimate recited in claim 1 of the present invention, which is the amount of time necessary for a client device to receive a content request over a network, but does not account for the retrieval or preparation of the requested content by the source device.

Moreover, claim 1 of the present invention recites a method for generating and graphically representing a third estimate, which includes a minimum, maximum, and average time of completion for a content request. Thus, the method of the Applicant's current invention utilizes three graphical representations for the total time estimate for completing a content request. The method of *Ording* teaches the use of only one progress

bar (*Id.*, Figure 2). Therefore, *Ording* does not teach or suggest all of the claim limitations of the present invention as recited in amended claim 1.

Furthermore, *Ording* is an example of a problem the Applicant is trying to correct with embodiments of the present invention. Since *Ording* merely teaches the graphical representation of an estimated time required to receive a content request over a network from a source device, the method of *Ording* is less accurate than the Applicant's current invention recited in claim 1 in estimating the total time required to send a content request. By way of example, current progress bars do not account for backend processing and preparation of the data to be downloaded. As a result, known progress bars are less accurate and provide a false indication to the user of the estimated time of completion of the content request. (*Application*, Page 2, lines 6-11). Hence, *Ording* teaches a method that the Applicant is endeavoring to improve with embodiments of the present invention.

Additionally, even if *Rao* and *Ording* could be properly combined, the combination of the two references would not form the presently claimed invention. *Rao* teaches that two time estimates are provided with the generated estimation data; one is an estimate of when a "first result" would be returned and the other is an estimate of the completion of the entire operation. (*Rao*, Col. 7, lines 55-58). *Ording* simply teaches a single graphical representation of an operating system's task performance and the progress of the task's completion. (*Ording*, Page 1, paragraph 0007 and Figure 2). Consequently, the combination of *Rao* and *Ording* will produce on a display device of a client device a single graphical representation of an estimate of when a "first result" would be returned and when the entire operation would be completed. However, the Applicant's present invention as recited in amended claim 1 will produce on a display device a graphical representation of a minimum, maximum, and average time of completion for a content request from a source device. Therefore, the combination of *Rao* and *Ording* does not teach or suggest all of the limitations recited in amended claim 1 of the current invention.

Accordingly, Applicant respectfully urges that the rejection of amended independent claims 1, 19, 25, 36, 42, and 43 under 35 U.S.C. § 103 as being unpatentable over *Rao* in view of *Ording* be withdrawn.

B. In view of the arguments contained in Section A above, Applicant has already demonstrated amended independent claims 1, 19, 25, 36, 42, and 43 to be in condition for allowance. Claims 2-18, 20-24, 26-35, and 37-41 are dependent claims depending on independent claims 1, 19, 25, and 36, respectively. Consequently, Applicant respectfully submits that claims 2-18, 20-24, 26-35, and 37-41 are also allowable, at least by virtue of their dependence on allowable claims. Furthermore, these dependent claims also contain features not taught by the *Rao* and *Ording* references.

C. For example, dependent method claim 10 of the present invention, which is representative of dependent computer program product claim 29, reads as follows:

10. The method of claim 1, wherein the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device.

With regard to claim 10, the Examiner stated:

Regarding claims 10 and 29, all the limitations of these claims have been noted in the rejection of claims 1 and 25 above, respectively. In addition, *Rao/Ording* discloses: wherein the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device (items time remaining to be copied fig. 2, *Ording*).

(Office Action, Pages 5 and 6).

Ording is a method and system whereby a user interface provides continuous feedback to a user regarding progress toward completion of a task being monitored in a status dialogue window. The progress is indicated by a graphic element such as a progress bar, whose size is increased to fill a space of predetermined area by an amount corresponding to the percentage of the task completed. (*Ording*, Abstract). In addition, *Ording* teaches that the number of files remaining to be operated on by the current task and the approximate amount of time remaining is indicated. (*Ording*, Page 3, paragraph 0025 and Figure 2). As Figure 2 in *Ording* plainly illustrates, the text of "Items remaining to be copied:" and "Time remaining:" always stays the same in the status

dialogue window. Only the numerical values for the remaining time and items to be copied are changed in the graphical display of *Ording*.

In contrast, Applicant's present invention recites in claim 10 that the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device. In other words, the text or wording contained within the graphical representation of the third estimate, which includes the first estimate of an amount of time to retrieve or prepare requested content in a source device and a second time estimate of an amount of time to receive the requested content over a communication link from the content source device, is changed when the content commences to be received by the client device. By way of example, a textual message indicating the current operations being performed, such as "preparing requested content" or "downloading content," may be displayed along with the progress bar to inform the user of the current operations being performed. This textual message may change, for example, from "Retrieving/Preparing Requested Content" to "Downloading Content" when the first data packet containing the requested content is received by the client device. (*Application*, Page 20, line 31 - Page 21, line 7 and Figures 10 and 11).

Ording does not teach or suggest that the graphical display includes associated text that changes from a first text to a second text when the requested content is received as recited in claim 10 of the current invention. Therefore, *Ording* does not teach or suggest textual changes to the graphical display when different operations are being performed as recited in claim 10 but merely numeric changes related to the performance of a task. As a result, *Ording* does not teach or suggest the features recited in dependent claim 10, which is representative of dependent claim 29, of Applicant's present invention.

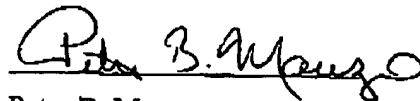
II. Conclusion

It is respectfully urged that the subject application is patentable over the cited prior art references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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